

DIVERSIFICATION ON SOUTHERN FARMS

Oats Should Be Principal Stock Feed in Cotton Belt.

MOST PROFITABLE IN SOUTH

Plant Would Reduce Washing and Leaching to Minimum, Furnish Grazing and Add to Deficient Supply of Humus.

(By G. H. ALFORD.)

From October 1 to November 15, according to the latitude, is the best time to sow oats in the cotton belt. The oat crop should be made the principal stock feed grown in the cotton belt. The area in oats should be fully as large as that in corn, but let us not forget the facts that as a stock feed and cash crop, oats is one of the best crops that can be grown in the south.

The chief crops grown all over the cotton belt are cotton and corn. As an average for a ten-year period of 1900 to 1909 there was planted from 10 to 15 acres of corn for each acre of oats in the various cotton belt states. During the same time an average of the oat crop per acre was \$10.09, while the average value per acre of corn was \$11.02. Figuring the cost of growing an oat crop and a corn crop, we find that the oat crop was the most profitable. There are several important reasons why we should sow millions of acres of oats in the cotton belt. The oat crop would reduce washing and leaching to the minimum, furnish grazing, add to the deplorably deficient supply of humus, add to the always short supply of feed stuffs and supplement the money crop—cotton.

Of course, there are better winter cover crops than oats. Burr clover and crimson clover are the vetches, and in some cases some of the other winter cereals are better. We do not claim that oats alone or that oats and hairy vetch combined should be grown for the sole purpose of supplying a cover crop. However, in view of the fact that oats will grow on poor land poorly prepared, and it costs little to seed an acre, it is a good winter cover



Good Oat Crop.

crop for the many thousands of farmers who have not learned to grow winter legumes.

Two and one-half acres were planted in oats at the experiment station at Baton Rouge, La., for a grazing experiment on September 28. October 29 seven Poland China hogs, weighing in total 276 pounds, were put on this plot and were given no feed but the green oats during the winter. February 17 the pigs weighed a total of 568 pounds. There was an average gain of 37 pound per pig per day for 110 days. From October 29 to January 1 45 head of sheep were pastured on this same plot. Of this number, eight ewes and nine lambs were pastured continuously there after February 17, at which date the lambs averaged 68 days old and 35.5 pounds each. Allowing six cents per pound for the lambs, we have a return of \$13.40 per acre, plus the pasturage of the sheep not considered in the estimate.

The loss of humus in the soil results in the increasing of its power of storing up and properly supplying crops with water. Soils with a liberal supply of humus are capable of more effectively withstanding drought than similar soils with less humus. The oat crop fills the soil full of roots, and the stubble also adds much humus to the soil.

The oat grain is very valuable feed, especially for young animals, because of its moderately high protein content and the large amount of ash and mineral matter. Pound for pound, oats are not as valuable for feeding mature animals as corn, four pounds of corn being equal to about five pounds of oats. However, when we consider the cost of growing the two crops and the fact that feed is always scarce when the oat crop is harvested, we are forced to admit that every farmer in the cotton belt should grow oats.

In attempting to build up the worn-out cotton lands, we must depend very largely on the leguminous crops. Now the oat crop is harvested early enough to permit the growing of a leguminous crop. The leguminous crop may be plowed under or it may be used as feed, and the manure returned to the land. If we are going to build up our land and raise good stock, we must grow oat crops and follow with legume crops.

Oats are probably the best paying small grain crops that can be grown

over practically the entire cotton belt. The same soil that will produce one bale of cotton or 40 bushels of corn, per acre will produce 60 bushels of oats. At the average price that has prevailed for oats during the last five years, the 60 bushels will sell for from \$36 to \$40 and the straw, when baled, will often pay for growing the grain.

It is best to plant oats after corn and peas. Cut the corn stalks and pea vines into pieces with disk harrow. The disk harrow is the best possible implement in preparing the corn and pea fields for oats. The drill will clog in trashy ground and particularly when working in uncut stalks and pea vines. When the disk harrow is used before the land is broken, the drill runs freely and easily, thus depositing

HOW CAN I INCREASE THE YIELD AND QUALITY OF MY OATS?

- 1—Fan and Grade Seed.
- 2—Seed Early.
- 3—Early and Medium Varieties Best.
- 4—Better Prepared Seed Bed.
- 5—Drilling Better Than Broadcasting.
- 6—Treat Early Oats for Smut.
- 7—Always Sow Clover.
- 8—Save the Crop by Good Shocking and Stacking.

the seed evenly. After using the disk harrow to cut the corn stalks, plow the land deep, then disk and double disk, and harrow and cross harrow until every inch of the soil has been stirred and broken as fine as possible.

A mixture of 300 pounds of 16 percent of acid phosphate, 100 pounds of cotton seed meal, and 200 pounds of potash, followed in March with a top dressing of 50 to 75 pounds of nitrate of soda per acre is good fertilizer for oats on average soil.

The best variety for fall sowing in the south are Red Rust proof type. The original Red Rust proof, the Apple and Hancock are so nearly alike that no one can tell them apart if shown side by side. The Burt oat is for spring sowing.

The quantity of seed that is necessary to sow an acre of oats is variable. If sown early in the season or sown on very fertile soil a smaller quantity of seed may be used than if sown late or sown on poor land. If the crop is planted 25 percent less seed may be used than if the same crop were to be sown broadcast.

There are three methods commonly practiced of planting oats, namely: Sowing broadcast, open furrow and drilling. Drilling of the seed is to be preferred, since considerably less seed can be used if drilled by machine; the seeds are covered to a uniform depth and come up, grow, and ripen uniformly; the small ridges made by the drill afford a slight degree of protection from the cold; and the yield from drilled oats is usually greater than that from broadcast oats. The seed saved, and the larger crops that usually result from drilled oats, will soon pay for a good drill on the farm.

It is well nigh impossible to discuss oats in the cotton belt without discussing lespedeza, cow peas, soy beans and peanuts, as these crops are almost as much a counterpart of oats as the Siamose twin Ang was of his brother Chang.

As soon as all danger of frost is past, sow about one bushel of lespedeza right on top of the growing oats, and make no attempt to cover what ever. It is advisable to divide the bushel into two halves and sow them broadcast, first one-half over the land walking east and west and the other half walking north and south.

The oats will be ready to cut in May and June. At this time the lespedeza plants will be so small as to be hardly perceptible, though you can see whether you have a stand or not. Up to that time the oats have been taking the strength and water from the soil, but the first summer rain makes a difference. The weeds come with a rush and threaten to choke out the lespedeza plants. At this time it is necessary to set the mower blade so high as not to touch the lespedeza and top the weeds once or twice.

The lespedeza begins to bloom in September and October, and is ready to harvest. It is best to cut when in bloom and all green. Do not cut when wet from dew or rain. Mow in forenoon, windrow and cock in five or six feet high, 200 to 300 pounds to the cock and cover with lowells or eight-ounce duck covers about nine feet square. After about three days open out, air is needed, and haul to barn or stack. It is, of course, unnecessary to offer suggestions relative to the growing of cow peas, soy beans and peanuts after oats. The farmers of the cotton belt have had some little experience in growing these crops after oats.

The development of the diversified agriculture and the increasing of the acreage devoted to the oats and the leguminous crops will do much to hasten the day of independence on the cotton belt farms.

LEADER OF THE NAVY ACADEMY ELEVEN



Captain Gilchrist.

Under the able direction of Captain Gilchrist, and backed up by Coach J. A. Reilly, who played halfback at New Haven two years ago, the midshipmen of Uncle Sam's Naval academy are being put through their practice games in preparation for the big game with their gridiron enemies of Uncle Sam's Military academy.

CHANGE IN RULES IS ASKED

Players' Fraternity Draw Up Demands and Stars Will "Hold Out" if Magnates Refuse Them.

If the members of the baseball players' fraternity stand pat on their demands made on the major league magnates and the latter refuse to give in to their aims, there should be a whole-sale holdout when it comes to signing contracts next year. A number of the big league stars have already agreed to hold out if the demands of the fraternity are turned down.

A series of demands were drawn up recently and will be placed in the hands of the magnates during the winter, after which they will be submitted to the national commission with the request that they be made part of the laws governing organized baseball. It was said that already 65 percent of the members of the players' fraternity have indorsed the proposition.

Four important demands are under consideration, it is understood. They are:

No player who has been a member of a major league club for ten years shall be given other than his unconditional release.

No player who has been a member of a major and minor league club, inclusive, for 12 years shall be given other than his unconditional release.

No player who has been carried on a major league's pay roll until July shall be released to the minors unless waivers are secured from the 16 clubs of the American and National leagues.

A major league club owner shall be prohibited from carrying a player who has an opportunity to play on another major league club until the late months of the season, thus taking advantage of the time when the teams are carrying many recruits, to send the player in question to the minors.

PHILLIPS.



Left Tackle on Princeton Team.

FOOTBALL IS MADE A "SPECIAL STUDY"

Football has been advanced to the dignity of a "special study" at Wesleyan university this year. The faculty announcement made at the opening exercises included this statement, and assigned Daniel Hutchinson of the University of Pennsylvania, as special football instructor, assisted by Doctor Fawcett, professor of physical education.

Under this faculty indorsement a winning football team is expected.

TALBOT.



Left Tackle on Yale Team.

PLAN A. A. U. CHAMPIONSHIPS

Ten-Mile Run, Seven-Mile Walk and Two Cross Countries Will Be Held in Vicinity of Gotham.

A mail vote on the holding of the ten-mile run championship, seven-mile walk, junior national cross-country and senior national cross-country championships for 1913 has been called for by James E. Sullivan, chairman of the championship committee of the Amateur Athletic union of the United States.

It is planned to hold all these championships in the vicinity of New York. In all probability the ten-mile run and seven-mile walk will be held on November 29, at a place to be selected later. The junior and senior cross-country championships will probably be held over the national course at Van Courtland park on November 8 and 15, respectively. The intercollegiate cross-country championships will also be held over the Van Courtland park course November 22.

Home Run Record. Dolly Gray, right fielder of the Charleston team of the Ohio State league, has broken all records for home runs the past season by smashing 33 round-trip wallops. Buck Freeman made 30 home runs while playing for Washington some years ago.

SCHEMES OF GRIDIRON

Real Football Player Is Thinking Every Minute of Game.

Rule Which Allows Punting Anywhere Behind Scrimmage Line Permits Revival—Officials Must Watch the Ball Closely.

With the playing of the opening games of the 1913 football season, close followers of the game, especially those who played under the old rules, are watching with interest the manner in which the players take advantage of the rules, some of which permit foxy players to "pull off" the unexpected if certain plays are used at the proper time.

Although the rules have not been changed to any great extent, there are many ways in which a heady player can keep his team out of danger by carefully sizing up the situation and ascertaining the plays which might work the best when his team is crowded near his own goal line. A real football player is thinking and scheming all the time, and it is this type who generally makes a name for himself.

The rule which states that when a forward pass is thrown out of bounds before striking the ground in the field of play the ball shall go to the opponents at the point where it crossed the sideline, is one which has not been taken advantage of enough. There are many players in a squad who can hurl the oval 40 or 50 yards with the accuracy of a baseball. If a coach is fortunate enough to have such a player this man should be carried along for this specialty.

Under the ruling which allows a re-substitution of a player at the beginning of the second and third quarters and at any time during the final period, a player who can throw the ball out of bounds 30 or 40 yards down the field is a valuable asset. If a team is close pressed and finally takes the ball away from its opponents on the one or two yard line, the natural thing to do is to punt the ball as far out of danger as possible.

In striking contrast to this method of preventing a team from scoring would be the sure, safe method of throwing the ball out of bounds 30 or 40 yards down the field. Even if the wind were blowing against the oval the passer would get more distance to his throw than a kicker, for the simple reason that the ball is thrown in a spiral fashion, thus allowing the ball to bore through the air and with a definite direction. The defensive team has no chance of receiving a free trial at the goal, and there is no chance of the catcher running the ball any distance.

This play was used sparingly last season, especially in the early stages. Near the close of the year the coaches used it more, and soon discovered the value of a man who could throw the oval a long distance with accuracy. The preliminary practice every season is devoted to kicking and throwing the oval, and the coaches now should have a good line on the men who are most adept in handling the ball.

The change in the rules which allows the ball to be kicked from any point back of the scrimmage line is sure to bring back the on-side kick, considered by many to be one of the most valuable ground gaining plays.

As the rule this season permits the kicker to boot the oval from any position, the old on-side kick is sure to come back into its own and be used a great deal. The play will be all the more valuable because the ball is free property the moment it strikes the ground, whereas in the old days the oval had to be touched by an opponent before one of the kicking sides could recover it. As a result there is going to be plenty of scrambling for the ball, so the officials will have to be on top of the play all the time to award the oval to its logical owner.

Although these plays should come in for a lot of consideration by coaches and players, there are other points which are of invaluable assistance to a team if the players carry out instructions. The point regarding a player stepping out of bounds or fighting to cross the side line when he is cornered is a most important one. When a team in possession of the ball is crowded within two yards from the side line the offensive eleven is in a "hole" and its chances of gaining ground mightily slim.

The players always should remember to fight to get out of bounds when tackled close to the boundary. It is almost impossible to gain ground on the wing close to the side line and it is almost as hard to make any headway on the wide side because the defense is shifted over to meet an expected attack. If a team is forced against the boundary it is much better to lose a down by sending a play out of bounds than it is to try to gain through the line or on the wide side.

Think Term Unfair.

A letter writer questions the use of the term "Big Three" as applied to Harvard, Yale and Princeton. He thinks it unfair to Penn, Cornell and Dartmouth. Its origin dates from 1874, when Harvard took up the game and the triangular tournament came into existence, Princeton having adopted the game in 1869 and Yale in 1872. Penn did not take up the game until 1876, Dartmouth in 1882 and Cornell in 1887.

Corbett at Stillwater.

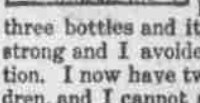
John Corbett, the former Harvard gridiron star, has been secured to coach the football squad of the A. and M. college at Stillwater, Okla.

MRS. MANGES ESCAPES OPERATION

How She Was Saved From Surgeon's Knife by Lydia E. Pinkham's Vegetable Compound.

Mogadore, Ohio.—"The first two years

I was married I suffered so much from female troubles and bearing down pains that I could not stand on my feet long enough to do my work. The doctor said I would have to undergo an operation, but my husband wanted me to try Lydia E. Pinkham's Vegetable Compound first. I took



three bottles and it made me well and strong and I avoided a dreadful operation. I now have two fine healthy children, and I cannot say too much about what Lydia E. Pinkham's Vegetable Compound has done for me."—Mrs. LEB MANGES, R. F. D. 10, Mogadore, Ohio.

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SLOAN'S LINIMENT Kills Pain

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